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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Hans-Christian Swoboda

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EXAMINER

OLSEN, LIN B

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/520,604	Applicant(s) SWOBODA ET AL.	
	Examiner LIN B. OLSEN	Art Unit 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9,10,12-19 and 21-249 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9,10,12-19 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 June 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the filing on February 25, 2010 of a response to the Office Action of December 3, 2009. The application currently contains 14 claims with claims 9 and 14 being independent.

Response to Amendment and Arguments

The Examiner thanks the applicant for resubmitting a certified copy of the translation of German Patent Application No. 10231687.2 to complete the Office's records for the disqualification of U.S. Patent Pub. No 2002/0177935 as prior art.

Applicant's arguments, see Pages 5-7 filed February 25, 2010 with respect to the rejection(s) of claim(s) 9, 10, 12-19 and 21-24 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Lebuhn/Winner and Asada.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims **9, 10, 12-19, 21-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Labuhn et al. (US 6,009,368) (Labuhn) in view of U.S. Patent. No. 5,400,864 to Winner et al. (Winner) in view of U.S. Patent No. 6,311,120 to Asada (Asada). Labuhn is concerned with an adaptive cruise control that uses deceleration

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control to prevent a vehicle from violating a desired minimum distance from a preceding vehicle. Winner, in the same field, is concerned with controlling the speed of a vehicle and its spacing from a preceding vehicle. Asada, also in the same field, is concerned with how an automatic speed control system that has been following a preceding car reacts when the car gets too close or gets lost.

Regarding independent **claim 9, A method for notifying a driver of a motor vehicle equipped with an adaptive distance and speed controller, comprising:** -

All three references deal with a vehicle having an adaptive distance and speed controller.

one of activating or deactivating a takeover prompt which informs the driver that the vehicle is coming critically close to a target object to prompt the driver to perform a brake intervention; - Labuhn (FIG. 4 and Column 8, lines 31-32, 36-43 and 52-53) - Labuhn's alert is not called a takeover alert; however, it does notify the driver when the vehicle gets critically close to the target object and something not automatic needs to be done. However, at col.4 lines 2-7 Labuhn specifies

“The alert module 14 may take the exemplary form of a vehicle instrument cluster or other display panel visual and/or audible alerting apparatus for conveying predetermined adaptive cruise control system information to the succeeding vehicle operator.”

Asada, in the same art, classifies the location of a preceding vehicle according to the areas shown in Fig. 8 and uses that data in the flowchart of Fig. 6. At col. 14, lines 40-45 Asada raise an alarm of “step on brake” due to reaching this critical distance.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the illustrated brake alert as one of the alerts that can be predetermined for a cruise control system.

wherein the activation or deactivation of the takeover prompt occurs –
Lebuhn (FIG. 4 and Column 8, lines 66-67 and Column 9, lines 1-2) **as a function of at least one of: i) a fixed minimum distance between a distance-controlled and speed- controlled vehicle and the target object**, - Lebuhn (FIG. 4, block 411, where XM is the minimum inter-vehicle spacing as described in Column 7, line 23) **ii) a relative speed-dependent minimum distance of the distance-controlled and speed-controlled vehicle in relation to the target object**, - Lebuhn (FIG. 4, block 411, where VR'TB is the relative speed-dependent minimum distance as described in Column 3, lines 54-56), **and iii) a maximum vehicle deceleration producible by the distance and speed controller**, - Lebuhn (FIG. 4, block 423 where DMAX is represents a deceleration limit as described in Column 9, lines 53-62) **and**

wherein the takeover prompt is further output when the driver overrides the distance and speed controller by depressing an accelerator and the vehicle comes critically close to the target object. – Labuhn does not discuss the alert's mechanism in detail nor the alert's action when the driver overrides the controller by accelerating, but Winner, which teaches a vehicle with an Adaptive Cruise Control (ACC) System, addresses this. This system allows the driver to override the system either by engaging the directional signal or by accelerating. As stated at col. 8 lines 65 to col. 9 line 3:

"In addition, provision may be made that while the distance control may be interrupted as described in connection with Fig. 3, at an intentional acceleration of the vehicle by the driver, a reduction of the safety distance may be indicated by a visual or audible alarm, so that if he so desires the driver may abandon the process of acceleration."

Thus if the operator depresses the accelerator causing the vehicle to make a dangerous approach to an obstacle, the collision alarm will be emitted. It would have been obvious to one of ordinary skill in the art at the time of the invention to use Winner's prior art elements of notifying the driver in Labuhn's system to yield the predictable result that the driver is notified of the impending dangerous approach to an obstacle regardless of how that condition came about and can take evasive action.

Regarding **claim 10, The method as recited in claim 9, wherein the takeover prompt is at least one of: a visual display in a field of view of the driver, and an acoustic signal in an interior of the vehicle.** – Labuhn (Column 3, lines 63-65, Column 4, lines 2-7). Labuhn does not explicitly disclose the display is in a field of view of the driver and an acoustic signal is in an interior of the vehicle. However, it is well known that the vehicle instrument cluster or other display panel is in the field of view of the driver and/or audible alerting apparatus for operator is an acoustic signal in an interior of the vehicle as the operator is inside of the vehicle while operating the vehicle (Column 3, lines 63-64, Column 4, lines 5-7).

Regarding **claim 12, The method as recited in claim 9, wherein activation thresholds and deactivation thresholds of the takeover prompt are not identical.** - Labuhn (FIG. 4, Column 8, lines 18-31).

Regarding **claim 13, The method as recited in claim 9, wherein the distance and speed controller emits and receives radar signals, with the aid of which preceding vehicles can be recognized as target objects.** - Labuhn (Column 1, lines 27-29, Column 3, lines 50-57).

Regarding independent **claim 14, A device for the distance and speed control of a motor vehicle,-** All three references deal with a vehicle having an adaptive distance and speed controller and Labuhn (Column 2, lines 62-64 and Column 3, lines 10-12, 50-54), **comprising:**

an arrangement which outputs a takeover prompt, informing a driver that the vehicle is coming critically close to a target object to prompt the driver to perform a brake intervention, - - Labuhn (FIG. 4 and Column 8, lines 31-32, 36-43 and 52-53) - Labuhn's alert is not called a takeover alert; however, it does notify the driver when the vehicle gets critically close to the target object and something not automatic needs to be done. However, at col.4 lines 2-7 Labuhn specifies

“The alert module 14 may take the exemplary form of a vehicle instrument cluster or other display panel visual and/or audible alerting apparatus for

conveying predetermined adaptive cruise control system information to the succeeding vehicle operator.”

Asada, in the same art, classifies the location of a preceding vehicle according to the areas shown in Fig. 8 and uses that data in the flowchart of Fig. 6. At col. 14, lines 40-45 Asada raise an alarm of “step on brake” due to reaching this critical distance. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the illustrated brake alert as one of the alerts that can be predetermined for a cruise control system.

the arrangement being configured so that activation and deactivation of the takeover prompt occurs - Lebuhn (FIG. 4 and Column 8, lines 66-67 and Column 9, lines 1-2) **as a function at least one of:**

i) a fixed minimum distance between the distance- and speed-controlled vehicle and the target object, - Lebuhn (FIG. 4, block 411, where XM is the minimum inter-vehicle spacing as described in Column 7, line 23)

ii) a relative speed-dependent minimum distance between the distance- and speed-controlled vehicle and the target object, -- Lebuhn (FIG. 4, block 411, where VR'TB is the relative speed-dependent minimum distance as described in Column 3, lines 54-56) **and**

iii) a maximum vehicle deceleration producible by the distance and speed controller, - Lebuhn (FIG. 4, block 423 where DMAX is represents a deceleration limit as described in Column 9, lines 53-62)

wherein the takeover prompt is further output when the driver overrides the distance and speed controller by depressing an accelerator and the vehicle comes critically close to the target object. - – Labuhn does not discuss the alert's mechanism in detail nor the alert's action when the driver overrides the controller by accelerating, but Winner, which teaches a vehicle with an Adaptive Cruise Control (ACC) System addresses this. This system allows the driver to override the system either by engaging the directional signal or by accelerating. As stated at col. 8 lines 65 to col. 9 line 3:

"In addition, provision may be made that while the distance control may be interrupted as described in connection with Fig. 3, at an intentional acceleration of the vehicle by the driver, a reduction of the safety distance may be indicated by a visual or audible alarm, so that if he so desires the driver may abandon the process of acceleration."

Thus if the operator depresses the accelerator causing the vehicle to make a dangerous approach to an obstacle, the collision alarm will be emitted. It would have been obvious to one of ordinary skill in the art at the time of the invention to use Winner's prior art elements of notifying the driver in Labuhn's system to yield the predictable result that the driver is notified of the impending dangerous approach to an obstacle regardless of how that condition came about and can take evasive action.

Regarding **claim 15, The device as recited in claim 14, further comprising: a display device, the display device displaying the takeover prompt in a field of view of the driver.** - Labuhn (Column 3, lines 63-65, Column 4, lines 2-7). Labuhn

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does not explicitly disclose the display device is in a field of view of the driver. However, it is well known that the vehicle instrument cluster or other display panel visual and/or audible alerting apparatus for operator interfacing provides visual display in a field of view of the driver as the operator is inside of the vehicle while operating the vehicle (Column 3, lines 63-64, Column 4, lines 5-7).

Regarding **claim 16, The device as recited in claim 14, further comprising: an acoustic device, the takeover prompt being output as an acoustic signal by the acoustic device in an interior of the vehicle.** - Labuhn (Column 3, lines 63-65, Column 4, lines 2-7). See paragraph 2a above. Labuhn does not explicitly disclose the acoustic device is in an interior of the vehicle. However, it is well known that the vehicle instrument cluster or other display panel visual and/or audible alerting apparatus for operator interfacing provides an acoustic signal in an interior of the vehicle as the operator is inside of the vehicle while operating the vehicle (Column 3, lines 63-64, Column 4, lines 5-7).

Regarding **claim 17, The device as recited in claim 14, further comprising: a radar device, the radar device configured to emit and receive radar signals so that a preceding vehicle can be recognized as a target object.** – Labuhn (Column 1, lines 27-29, Column 3, lines 50-57).

Regarding **claim 18**, The device as recited in claim 14, further comprising: a **display device, the display device displaying the takeover prompt in a field of view of the driver; and**

an acoustic device, the takeover prompt being output as an acoustic signal by the acoustic device in an interior of the vehicle. - Labuhn (See rejections of claims 15 and 16, above).

Regarding **claim 19**, The device as recited in claim 18, further comprising: a **radar device, the radar device configured to emit and receive radar signals so that a preceding vehicle can be recognized as a target object.** – Labuhn – See rejection of claim 17 above

Regarding **claim 21**, The method as recited in claim 14, wherein **activation thresholds and deactivation thresholds of the takeover prompt are not identical.** - Labuhn – see rejection of claim 12 above.

Regarding **claim 22**, The method as recited in claim 21, wherein the **distance and speed controller emits and receives radar signals, with the aid of which preceding vehicles can be recognized as target objects.** – Labuhn See rejection of claim 13 above

Regarding **claim 23**, The device as recited in claim 14, further comprising:

at least one of a display device, the display device displaying the takeover prompt in a field of view of the driver, and an acoustic device, the takeover prompt being output as an acoustic signal by the acoustic device in an interior of the vehicle; and - Labuhn (Column 3, lines 63-65, Column 4, lines 2-7). (See discussion at claim 15 above) and (Column 3, lines 63-65, Column 4, lines 2-7). (See discussion at claim 15 above)

a radar device, the radar device configured to emit and receive radar signals so that a preceding vehicle can be recognized as a target object; - Labuhn (Column 1, lines 27-29, Column 3, lines 50-57) (See discussion at claim 17 above).

wherein activation thresholds and deactivation thresholds of the takeover prompt are not identical, and (See rejection of claim 21, above).

wherein the distance and speed controller emits and receives radar signals, with the aid of which preceding vehicles can be recognized as target objects. (See rejection of claim 22, above).

Regarding **claim 24, The method as recited in claim 9, wherein the takeover prompt is at least one of:**

a visual display in a field of view of the driver, and

an acoustic signal in an interior of the vehicle, Labuhn - (Column 3, lines 63-65, Column 4, lines 2-7) (See discussion at claim 10 above)

wherein activation thresholds and deactivation thresholds of the takeover prompt are not identical, and - Labuhn (FIG. 4, Column 8, lines 18-31) (See discussion at claim 12 above)

wherein the distance and speed controller emits and receives radar signals, with the aid of which preceding vehicles can be recognized as target objects.- Labuhn (Column 1, lines 27-29, Column 3, lines 50-57) (See discussion at claim 12 above).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LIN B. OLSEN whose telephone number is (571)272-9754. The examiner can normally be reached on Mon - Fri, 8:30 -5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lin B Olsen/
Examiner, Art Unit 3661

**/Thomas G. Black/
Supervisory Patent Examiner, Art Unit 3661**